

# Intro

Machine Learning Course

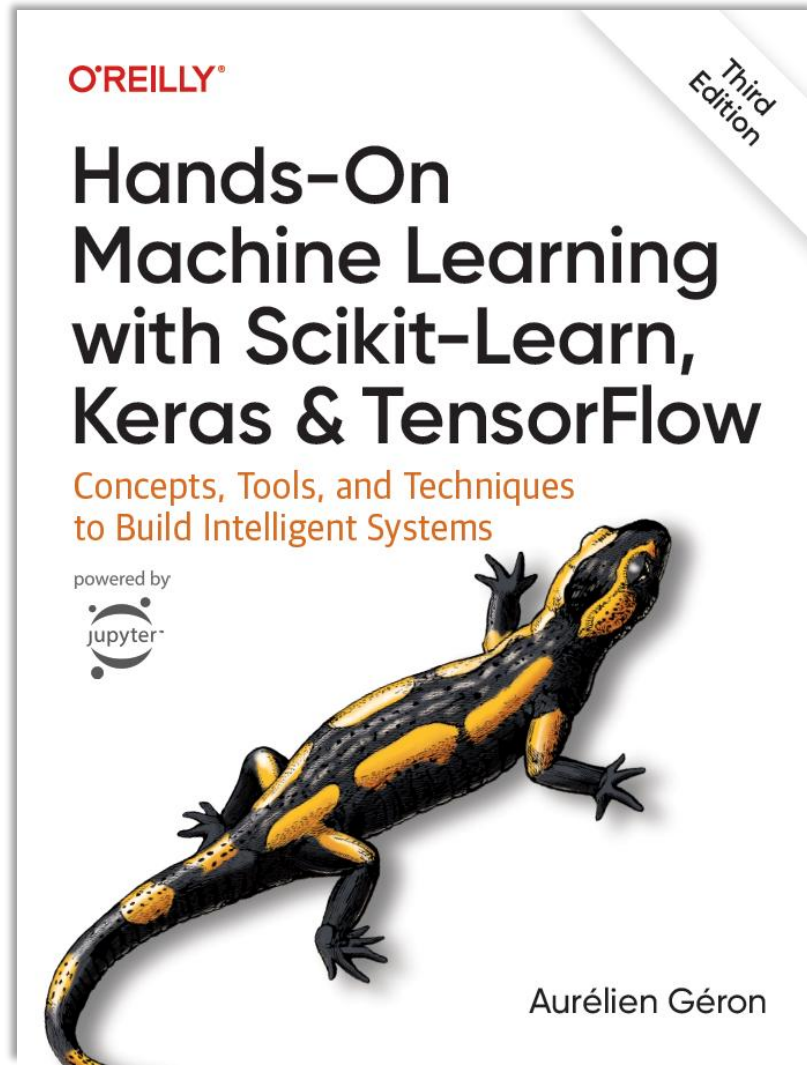
Saeed Mohagheghi

# Course Resources

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- Source Book:

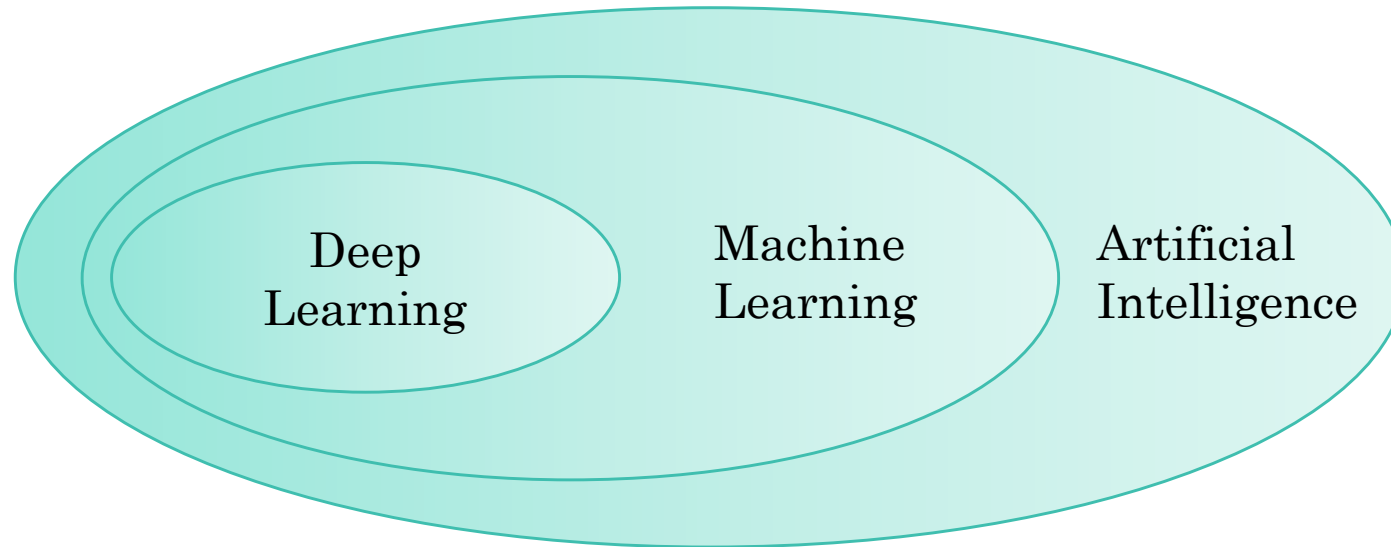
GitHub Repository:



# What is ML?

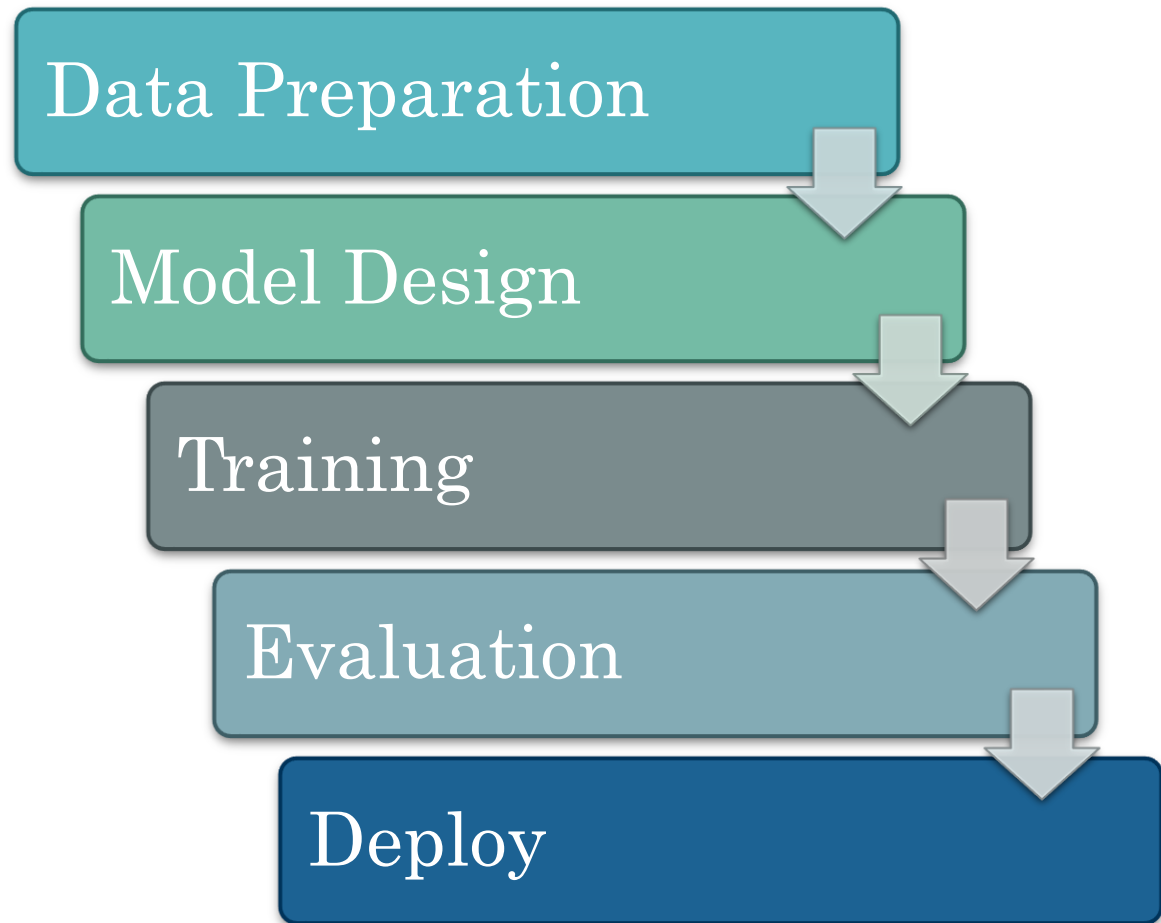
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- “ **Models** with the ability to **Learn** (from data) without being explicitly programmed ”



# ML Pipeline

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# ML Pipeline

- ML Cycle

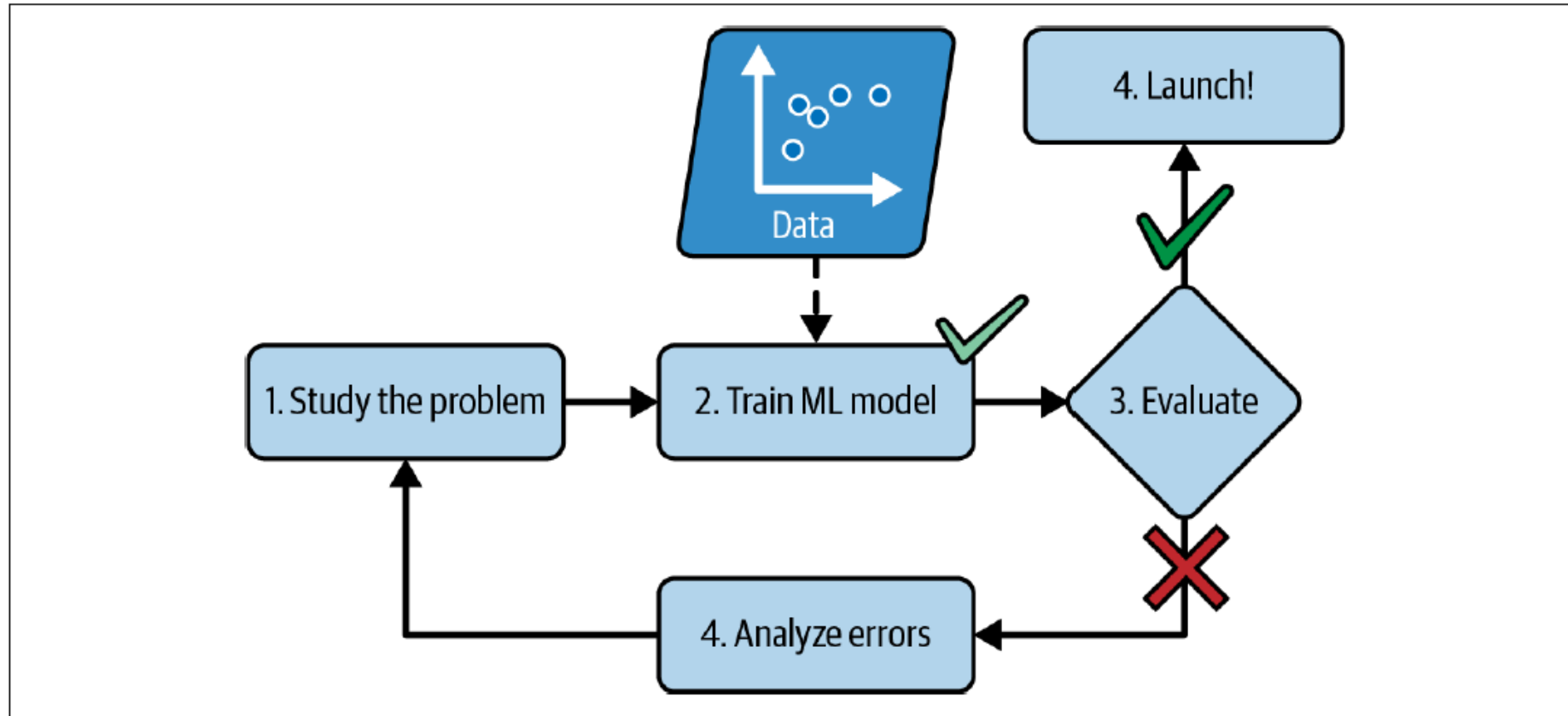
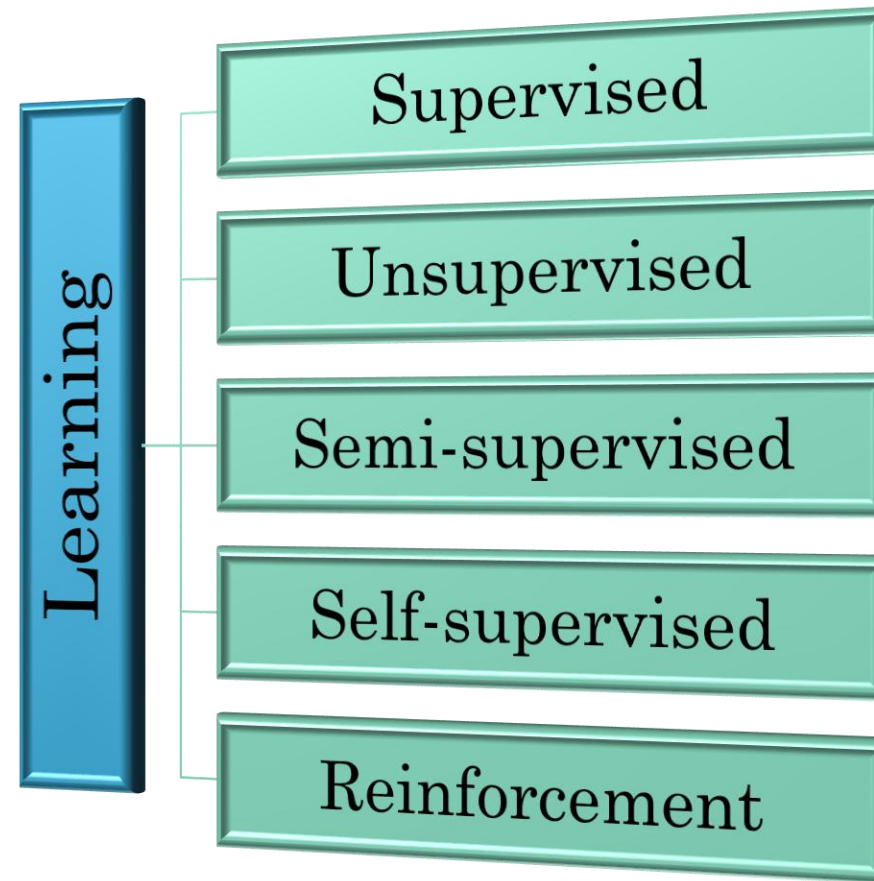


Figure 1-2. The machine learning approach

# Learning Methods

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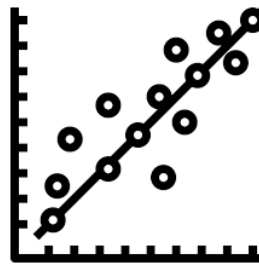
→ Read Book's Chapter 1

# Simple Example

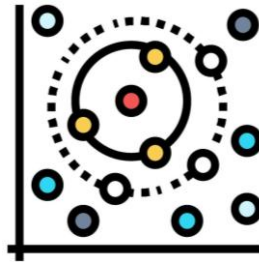
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- Predict **Life Satisfaction** from **GDP per capita** !
- Methods:

- Linear Regression (Model-based)



- k-nearest neighbors (Instance-based)



→ Book's Example 1-1